I. AMENDMENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

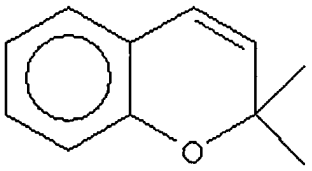
1.-23. (canceled)

24. (currently amended): A method for preparing a latex with photochromic properties comprising:

preparing an aqueous emulsion (I) of a composition A comprising:

at least one organic monomer Z, wherein said at least one monomer is further defined as comprising a C=C group and being capable of free-radical polymerization, and

one or more organic photochromic compounds containing a nucleus of formula:



; ~~and~~

polymerizing composition A in the presence of a water-soluble initiator to obtain particles of an at least partially polymerized latex with photochromic properties;

adding to the particles of an at least partially polymerized latex a second aqueous emulsion (II) containing a composition B comprising at least one organic monomer capable of free-radical polymerization; and

polymerizing the composition B to obtain a latex comprising at least biphasic photochromic particles.

25. (previously presented): The method of claim 24, wherein composition A comprises only one type of organic monomer Z.

26. (currently amended): The method of claim 24, wherein composition [[a]] A comprises more than one type of organic polymer Z.

27. (previously presented): The method of claim 24, wherein the latex is a fully polymerized latex.

28. (canceled)

29. (canceled)

30. (currently amended): The method of claim [[29]] 24, wherein the biphasic latex is further defined as comprising a core/skin structure.

31. (previously presented): The method of claim 24, wherein the water-soluble initiator is introduced progressively to the aqueous emulsion I, during the polymerization.

32. (previously presented): The method of claim 24, wherein the water-soluble initiator and the aqueous emulsion (I) are each introduced progressively into a reaction medium throughout polymerization.

33. (previously presented): The method of claim 24, wherein the water-soluble initiator is an alkali or ammonium persulfate.

34. (previously presented): The method of claim 33, wherein the water-soluble initiator is potassium or sodium persulfate.

35. (previously presented): The method of claim 24, wherein the percentage by weight of the initiator with respect to total organic weight of monomer or monomers capable of free-radical polymerization used for the preparation of the latex is between 0.1 and 1%.

36. (previously presented): The method of claim 24, wherein the organic monomer Z is an alkyl (meth)acrylate monomer.

37. (previously presented): The method of claim 24, wherein composition A is further defined as comprising at least one monomer Z which is further defined as a low Tg monomer which leads to a homopolymer whose glass transition temperature is less than or equal to 0°C.

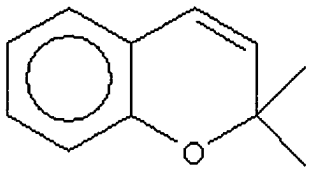
38. (previously presented): The method of claim 37, wherein the low Tg monomer represents at least 40% by weight of the monomers capable of free-radical polymerization.

39. (previously presented): The method of claim 24, wherein the particles of the latex are further defined as having a diameter of 50 to 400 nm.

40. (previously presented): The method of claim 24, wherein a dry extract of the latex represents from 30 to 50% of the total weight of the latex.

41. (previously presented): The method of claim 24, wherein the pH of the latex is between 5 and 7.

42. (currently amended): A latex with photochromic properties, further defined as comprising particles of a polymer material resulting from the free-radical polymerization of at least one monomer Z with a C=C group comprising one or more organic photochromic compound comprising a nucleus of formula:



,

the particles of said polymer material having an average size of between 50 and 400 nm and a biphasic structure of the core/skin type, and

wherein the organic photochromic compound is further defined as not containing an indoline ring.

43. (previously presented): The latex of claim 42, wherein the particles are further defined as having an average size of between 80 and 300 nm.

44. (previously presented): The latex of claim 43, wherein the particles are further defined as having an average size between 150 and 250 nm.

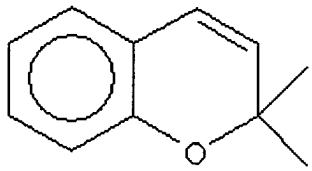
45. (canceled)

46. (canceled)

47. (currently amended): The latex of claim [[46]] 42, wherein the organic photochromic compound is contained in the core of the particles.

48. (previously presented): The latex of claim 42, wherein a dry extract of the latex represents from 30 to 50% of the total weight of the latex.

49. (currently amended): A substrate comprising a dry latex film with photochromic properties, the latex further defined as comprising particles of a polymer material resulting from the free-radical polymerization of at least one monomer Z with a C=C group comprising one or more organic photochromic compound comprising a nucleus of formula:



the particles of said polymer material having an average size of between 50 and 400 nm and a biphasic structure of the core/skin type, and

wherein the organic photochromic compound is further defined as not containing an indoline ring.

50. (previously presented): The substrate of claim 49, wherein the film has a thickness of between 3 and 20 μm.

51. (previously presented): The substrate of claim 49, further defined as comprising an anti-abrasion coating.

52. (previously presented): The substrate of claim 49, further defined as comprising an anti-reflection coating.

53. (previously presented): The substrate of claim 49, further defined as comprising an anti-abrasion coating on the latex film and an anti-reflection coating on the anti-abrasion coating.

54. (previously presented): The substrate of claim 49, further defined as an ophthalmic lens.

55. (previously presented): The method of claim 39, wherein the particles of the latex are further defined as having an average size of between 80 and 300 nm.

56. (previously presented): The method of claim 55, wherein the particles are further defined as having an average size between 150 and 250 nm.

57. (previously presented): The method of claim 24, wherein the organic photochromic compound is further defined as not containing an indoline ring.

58. (previously presented): The method of claim 57, wherein the particles of polymer material have a biphasic structure of the core/skin type.

59. (previously presented): The method of claim 58, wherein the organic photochromic compound is contained in the core of the particles.

60. (previously presented): The method of claim 24, wherein the latex is further defined as a dry latex film.

61. (previously presented): The method of claim 60, wherein the dry latex film has a thickness of between 3 and 20 μm.

62. (previously presented): The method of claim 24, wherein a substrate comprises the latex.

63. (previously presented): The method of claim 62, wherein the substrate further comprises an anti-abrasion coating.

64. (previously presented): The method of claim 62, wherein the substrate further comprises an anti-reflection coating.

65. (previously presented): The method of claim 62, wherein the substrate comprises an anti-abrasion coating on the latex film and an anti-reflection coating on the anti-abrasion coating.

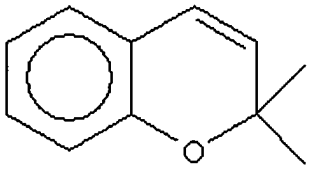
66. (previously presented): The method of claim 62, wherein the substrate is further defined as an ophthalmic lens.

67. (new): A method for preparing a latex with photochromic properties comprising:

preparing an aqueous emulsion (I) of a composition A comprising:

at least one organic monomer Z, wherein said at least one monomer is further defined as comprising a C=C group and being capable of free-radical polymerization, and

one or more organic photochromic compounds containing a nucleus of formula:



; and

polymerizing composition A in the presence of a water-soluble initiator to obtain particles of an at least partially polymerized latex with photochromic properties,

wherein the water-soluble initiator

(i) is introduced progressively to the aqueous emulsion (I), during the polymerization, or

(ii) and the aqueous emulsion (I) are each introduced progressively into a reaction medium throughout polymerization, or

(iii) is an alkali or ammonium persulfate.

68. (new): The method of claim 67, wherein the water-soluble initiator is introduced progressively to the aqueous emulsion I, during the polymerization.

69. (new): The method of claim 67, wherein the water-soluble initiator and the aqueous emulsion (I) are each introduced progressively into a reaction medium throughout polymerization.

70. (new): The method of claim 67, wherein the water-soluble initiator is an alkali or ammonium persulfate.

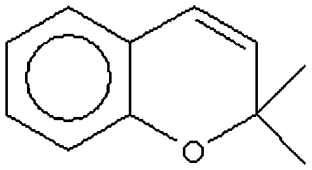
71. (new): The method of claim 70, wherein the water-soluble initiator is potassium or sodium persulfate.

72. (new): A method for preparing a latex with photochromic properties comprising:

preparing an aqueous emulsion (I) of a composition A comprising:

at least one organic monomer Z, wherein said at least one monomer is further defined as comprising a C=C group and being capable of free-radical polymerization, and wherein the at least one monomer Z is a low Tg monomer which leads to a homopolymer the glass transition temperature of which is less than or equal to 0°C; and

one or more organic photochromic compounds containing a nucleus of formula:



; and

polymerizing composition A in the presence of a water-soluble initiator to obtain particles of an at least partially polymerized latex with photochromic properties.

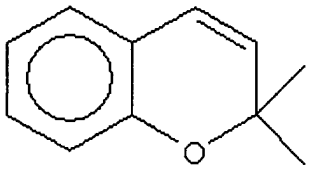
73. (new): The method of claim 72, wherein the low Tg monomer represents at least 40% by weight of the monomers capable of free-radical polymerization.

74. (new): A method for preparing a latex with photochromic properties comprising:

preparing an aqueous emulsion (I) of a composition A comprising:

at least one organic monomer Z, wherein said at least one monomer is further defined as comprising a C=C group and being capable of free-radical polymerization, and

one or more organic photochromic compounds containing a nucleus of formula:



; and

polymerizing composition A in the presence of a water-soluble initiator to obtain particles of an at least partially polymerized latex with photochromic properties,

wherein the particles have a biphasic structure of the core/skin type, and

wherein the organic photochromic compound is further defined as not containing an indoline ring.

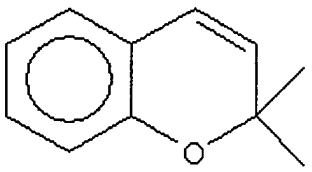
75. (new): The method of claim 74, wherein the organic photochromic compound is contained in the core of the particles.

76. (new): A method for preparing a latex with photochromic properties comprising:

preparing an aqueous emulsion (I) of a composition A comprising:

at least one organic monomer Z, wherein said at least one monomer is further defined as comprising a C=C group and being capable of free-radical polymerization, and

one or more organic photochromic compounds containing a nucleus of formula:



; and

polymerizing composition A in the presence of a water-soluble initiator to obtain particles of an at least partially polymerized latex with photochromic properties,

wherein a substrate comprises a film of the latex and wherein the substrate comprises an anti-abrasion coating on the latex film, or an anti-reflection coating on the latex

film, or an anti-abrasion coating on the latex film and an anti-reflection coating on the anti-abrasion coating.

77. (new): The method of claim 76, wherein the substrate comprises an anti-abrasion coating.

78. (new): The method of claim 76, wherein the substrate comprises an anti-reflection coating.

79. (new): The method of claim 76, wherein the substrate comprises an anti-abrasion coating on the latex film and an anti-reflection coating on the anti-abrasion coating.

80. (new): The method of claim 76, wherein the substrate is an ophthalmic lens.